

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

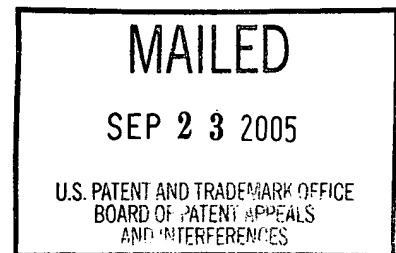
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SHINICHI BAN and TOSHIHIKO KARASAKI

Appeal No. 2005-1884
Application No. 09/198,534

ON BRIEF



Before THOMAS, KRASS and MACDONALD, Administrative Patent Judges.
KRASS, Administrative Patent Judge.

Decision On Appeal

This is a decision on appeal from the final rejection of claims 1-8, 10-25, 29-31, 34, 35, and 37-39.

The invention is directed to processing 3-D data for producing a model of an existing object.

Appeal No. 2005-1884
Application No. 09/198,534

Representative independent claim 1 is reproduced as follows:

1. A data processing apparatus for processing inputted 3-dimensional form data of an object, said data processing apparatus comprising:

a modifying unit which modifies a form of a part of the inputted 3-dimensional form data with maintaining a form of other parts thereof based on 2-dimensional image data of the object.

The examiner relies on the following reference:

Munetsugu et al. (Munetsugu) 6,141,431 Oct. 31, 2000
(filed Feb. 1, 1996)

Claims 1-8, 10-25, 29-31, 34, 35, and 37-39 stand rejected under 35 U.S.C. § 103 as unpatentable over Munetsugu.

Reference is made to the briefs and answer for the respective positions of appellants and the examiner.

OPINION

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or

Appeal No. 2005-1884
Application No. 09/198,534

to combine prior art references to arrive at the claimed invention. Such reason must stem from some teachings, suggestions or implications in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See Id.; In re Hedges, 783 F.2d 1038, 1040, 228 USPQ 685, 687 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1051, 189 USPQ 143, 146-147 (CCPA 1976). Only those arguments actually made by appellant have been considered in this

decision. Arguments which appellant could have made but chose not to make in the brief have not been considered and are deemed to be waived [see 37 CFR § 41.67(c)(1)(vii)].

It is the examiner's position that Munetsugu discloses an image processing system having a modifying unit for modifying a portion of the data input while maintaining a form based on 2-D image data of an object, referring to column 3, lines 35-38, of the reference, wherein a face surface model is generated on the basis of the front face image.

The examiner recognized that Munetsugu did not explicitly disclose a 3-D form data and a 2-D image data, but, the examiner asserts, it is well known that the model of the face is 3-D and an image of the face is 2-D (see page 3 of Paper No. 17).

The examiner concludes that it would have been obvious to "modify the Munetsugu's image processing system of hair removal on the face of the person in a model per the face image of the person by introducing the 3-dimensional form data as the face model and 2 dimensional data as the face image, as it is well known in the art that a model is a 3-dimensional surface. This modification will provide a modifying unit that will modify a face of an object per the image of an object" (Paper No. 17-page 3).

Appellants contend that the examiner has not established that Munetsugu discloses a modifying unit which modifies a form of a part of the **inputted 3-dimensional form data** with maintaining a form of other parts because column 3, lines 35-38, of the reference, referred to by the examiner, merely states that

The image processing apparatus may further comprise a face surface model generating part for generating the face surface model on the basis of the front face image.

Therefore, contend appellants, while Munetsugu may describe that a face surface model (3-D) is generated on the basis of the front face image (2-D), it does not suggest that there is **inputted 3-dimensional form data**, and that a part of this **inputted 3-dimensional form data** is modified.

While the claim does appear rather broad, we cannot sustain the rejection of claim 1, or of dependent claims 2-8 and 10-13, under 35 U.S.C. § 103 because the examiner has failed to establish a prima facie case of obviousness.

As we view the reference, Munetsugu appears to show a three-dimensional face surface model in Figure 4. Also, see column 6, lines 7-13. Figure 1 further shows information from this 3-D face surface model being input to a processing system. Thus, it appears fair to say that Munetsugu suggests a data

processing apparatus for processing inputted 3-dimensional form data of an object, as claimed.

However, the claim further requires that there be a "modifying unit" wherein "a form of a part of the inputted 3-dimensional form data" is modified "with maintaining a form of other parts thereof based on 2-dimensional image data of the object."

We find no such modification suggested in Munetsugu. The examiner relies on the cited portion of column 3 for such a teaching, but this portion only recites that the apparatus has a "face surface model generating part" and that this part is for generating "the face surface model on the basis of the front face image." Thus, it appears that the face surface model (3-D image) may be generated from the 2-dimensional data of the front face image. But, we find no suggestion that any 3-dimensional form data (i.e., the face surface model), or portion thereof, is modified, as required by the instant claims.

The examiner contends that it would have been obvious to modify Munetsugu's system "by introducing the 3-dimensional form data as the face model and 2 dimensional data as the face image" (Paper No. 17-page 3) because it is well known that a model is a 3-dimensional surface. We don't follow the examiner's reasoning.

Appeal No. 2005-1884
Application No. 09/198,534

Merely because something is, per se, well known, does not lead to the conclusion that it would have been obvious to employ that well known thing in any manner and under all circumstances. The examiner's rationale appears to be a hindsight reconstruction of the instant claimed subject matter.

Moreover, Munetsugu appears to show a 3-dimensional model of an object in Figure 4, so the issue is not whether it was known that a model is a 3-dimensional surface. The issue is why would the artisan modify Munetsugu's 3-dimensional model of Figure 4 so as to input 3-dimensional form data from that model and modify a form of a part of that data with maintaining a form of other parts thereof on 2-dimensional image data of the modelled object. Nothing in Munetsugu suggests this modification, so the examiner must be relying on impermissible hindsight to reach the instant claimed subject matter. That is not permissible within the meaning of 35 U.S.C. § 103.

Appellants argue, at pages 6-7 of the principal brief, that a size of a hair image in Munetsugu is merely adjusted to a size of a face information model and that this "3-dimensional form data, is **entirely** enlarged and **entirely** reduced" but there is no disclosure of modifying "...a form of **a part of the inputted 3-dimensional form data** with maintaining a form of other parts

Appeal No. 2005-1884
Application No. 09/198,534

thereof." We note that if 3-dimensional form data is entirely enlarged or reduced, this would read on modifying a form of a **part** of the inputted 3-dimensional form data because the whole of an entity is also a **part** of that entity, viz., a 100% part. If this is all that was required by the instant claim, appellants' argument would be unpersuasive. However, claim 1 further requires "maintaining a form of **other parts** thereof..." If we consider **all** of Munetsugu's 3-dimensional data to be a **part** of that data, which is reasonable, then there would be no other parts of that form data to be maintained based on 2-dimensional image data of the object, as required by the language of instant claim 1. Accordingly, Munetsugu still does not suggest the instant claimed subject matter.

The rejection of claims 1-8, and 10-13 under 35 U.S.C. § 103 is reversed.

The rejection of claims 14-20 under 35 U.S.C. § 103 is also reversed since independent claim 14 contains language similar to that of claim 1 re "modifying a form of a part...with maintaining a form of other parts...".

We will, however, sustain the rejection of claims 21-25, 29-31, 34, 35, and 37-39 under 35 U.S.C. § 103.

Appeal No. 2005-1884
Application No. 09/198,534

Appellants do not separately argue the individual merits of these claims. These claims do not include, as do claims 1 and 14, any recitation of modifying a "form of a part of the inputted 3-dimensional form data with maintaining a form of other parts thereof..." Rather, these other claims recite modification of a **part** of the 3-dimensional form data, but say nothing about "maintaining a form of **other parts** thereof." Therefore, for the reasons supra, since a **part** may constitute a **whole**, and appellants admit, at pages 6-7 of the principal brief, that in Munetsugu, "the face information model, as 3-dimensional form data, is **entirely** enlarged and **entirely** reduced," the instant claimed subject matter would appear to have been obvious in view of Munetsugu. Appellants argue no other limitations of claims 21-25, 29-31, 34, 35, and 37-39.

Accordingly, the rejection of these claims under 35 U.S.C. § 103 is sustained.

Since we have sustained the rejection of claims 21-25, 29-31, 34, 35, and 37-39 under 35 U.S.C. § 103, but we have not sustained the rejection of claims 1-8, and 10-20 under 35 U.S.C. § 103, the examiner's decision is affirmed-in-part.

Appeal No. 2005-1884
Application No. 09/198,534

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

JAMES D. THOMAS
Administrative Patent Judge

ERROL A. KRASS
Administrative Patent Judge

ALLEN R. MACDONALD
Administrative Patent Judge

BOARD OF PATENT
APPEALS
AND
INTERFERENCES

EK/rwk

Appeal No. 2005-1884
Application No. 09/198,534

MCDERMOTT WILL & EMERY LLP
600 13TH STREET, N.W.
WASHINGTON, DC 20005-3096